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THE HOSPITAL SHIP: A MIXED BLESSING FOR THE OPERATIONAL COMMANDER

by

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A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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ABSTRACT

The hospital ship is a mixed blessing for the operational commander. Undeniably, the ship provides an exceptional theater medical asset with it's highly advanced equipment and specialized practitioners. Unfortunately, however, there are numerous constraints and limitations associated with the hospital ship and its employment in support of combat, humanitarian and disaster relief missions. The purpose of this paper is to provide the operational commander with "need to know" information regarding the capabilities and the limitations of our nation's hospital ships, MERCY and COMFORT, so that he may he use the hospital ship platform more efficiently and prevent it from becoming a liability and possible casualty. The hospital ships' mission(s), recent employments, and future utility are also discussed.

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INTRODUCTION

The hospital ships, USNS Mercy (T-AH 19) and USNS Comfort (T-AH 20), each provide the operational commander with "medical might," which at the very least, is comparable to the warfighting capability of an aircraft carrier. And as is the case with any other weapon in his arsenal, it is essential that the operational commander have a thorough understanding of the capabilities and limitations of the ship both prior to and during the mission for which he has been assigned. Without this knowledge, he cannot be expected to utilize the ship in the most efficient manner and, just as importantly, prevent it from becoming a liability and possible casualty. Once a recipient of this knowledge, however, the operational commander may be apt to view the hospital ship for just what it is, a mixed blessing.

This paper will begin by providing the operational commander with "need to know" information regarding the capabilities and limitations of our nation's hospital ships, with a special emphasis on the Geneva Convention regulations. Lessons learned for the operational commander will be interspersed among these facts and figures. Then, after presenting the primary and secondary mission statements for the T-AHs, the recent employments of the *Mercy* and the *Comfort* will be examined in relation to their mission. Finally, the future of the hospital ships in the operational arena will be discussed.

CAPABILITIES AND LIMITATIONS

Background and Characteristics. The hospital ship, USNS Mercy, was commissioned by the U.S. Navy in 1986 and is layberthed in Oakland, California while the hospital ship, USNS Comfort, was commissioned in 1987 and is layberthed in Baltimore, Maryland. Each was converted from a large (106,618 ton) San Clemente Class tanker and has an overall length of

895 feet and a draft of 33 feet ⁱ Each has a cruising speed of 17.5 knots and an endurance of 13,420 nautical miles. ⁱⁱ For Desert Shield, the transit time was 28 days for the *Mercy* and 20 days for the *Comfort*. ⁱⁱⁱ

As was discovered during Desert Storm, helicopter medical evacuation (MEDEVAC) is the only reliable means of patient transfer to a T-AH. The helicopter deck of the ship can accommodate any size military helicopter, but safely land only one at a time. Additionally, there is no organic aircraft attached to either ship and only a skeleton crew to provide helo deck coverage 16 hours per day. Uuring Desert Shield, CINCCENT tasked ARCENT with providing air ambulance support to the hospital ships. As a result, twelve Army UH-60 Blackhawk helicopters deployed to the CENTCOM area of operations (AOR) to support ship-to-shore patient evacuation for the *Mercy* and the *Comfort* and, as a secondary mission, provide logistics support to theater medical facilities. These aircraft remained under ARCENT command and control, which led to occasional disputes over their best use during the period before hostilities began, but worked out quite well overall. vi Since the Army possesses more helicopter assets than any other service and remains the only one with dedicated MEDEVAC helicopters, the Blackhawks have been unofficially assigned the mission to support the hospital ships now and in the future. A Blackhawk squadron will be on hand to evacuate casualties to the Mercy during Kernel Blitz, the fleet exercise scheduled to commence off the coast of southern California during late March 1995. viii

When at full operating status, the *Mercy* and the *Comfort* each provide Echelon III (resuscitative and definitive) casualty care. The 1000 bed capacity includes 12 operating rooms and 80 intensive care beds. When staffed for upwards of 1000 patients, the medical

support on board exceeds 850 personnel and is capable of rendering a vast array of specialty services. During Desert Shield/Storm over 300 computerized axial tomography (CAT) scans were performed on board the hospital ships. ix

Despite the technically advanced nature of the hospital ship, there are physical limitations that can adversely affect both patients and staff. First, there are not enough isolation spaces to care for patients with contagious diseases such as tuberculosis (TB). This concern was expressed by the medical personnel who served on the *Mercy's* maiden voyage to the Philippines in 1987, but was apparently never taken for action. During the *Comfort's* recent utilization as a Migrant Processing Center in Operation Able Manner, the inability to handle a vast number of Haitians with both active and suspected TB, proved to be an overwhelming problem. "Hundreds of migrants at any given time were forced to remain outside on the weather deck and despite the use of masks, medical personnel were placed at an increased risk for contracting TB."

A second limitation of the hospital ship is that it lacks the supplies, space and the capacity to deal with even moderate numbers of chemical casualties. Although decontamination is not doctrinally the responsibility of the hospital ship, it is unrealistic to expect that contaminated casualties will not be evacuated to the ship in the event of a chemical, biological, or radiological attack.^{xi}

Operating Status and Chain of Command. Each hospital ship is layberthed in reduced operating status five (ROS 5) and has a cadre crew of both military and Military Sealist Command (MSC) personnel who maintain the ship and it's medical equipment. Capable of deployment within five days of receiving mobilization orders, there is no strategic air or sea lift

required to get the ship to the theater of operations. Presently, the *Mercy* and *Comfort* deploy with fifteen days worth of supplies on board. In an attempt to cut costs, however, there is talk of decreasing the hospital ship supply stores to five days. Xiii

As resource sponsor, the Chief of Naval Operations (CNO) is responsible for funding and coordination of the ship, while the Bureau of Medicine actually implements the staffing. The hospital ship can be activated by request of a unified commander-in-chief in need of support or by implementation of an operation plan. Of interest, however, is that the Joint Chiefs of Staff declined to order the deployment of a hospital ship (with the requisite staff to support 250 casualties) for Operation Restore Hope in Somalia because of cost factors. As a result of their decision, and Kenya's subsequent refusal to allow the offloading of a prepositioned fleet hospital, a reconfigured field hospital was flown in on six C-5A aircraft at tremendous cost and further delayed medical support in theater. xiv

CINCPAC and CINCLANT, working through their naval components, are responsible for the operational employment of the hospital ships, *Mercy* and *Comfort*. Upon activation, this authority can be transferred to the supported CINC if necessary. Once the hospital ship enters the AOR, the chain of command typically runs from the ship's master (in the MSC chain of command) to the numbered fleet to the naval component commander to the unified commander. During Desert Storm, the NAVCENT concept of operations placed the fleet hospitals and hospital ships under the operational control of NAVLOGSUPFOR, located ashore in Bahrain. The NAVCENT surgeon was also assigned ashore as his assistant chief of staff. Separation of the NAVCENT surgeon from other members of the staff, limited his involvement in the planning process his ability to make timely and informed judgments on

theater medical issues. Although the Seventh Fleet Surgeon remained aboard the NAVCENT flag ship to act as a liaison and medical advisor, this provided an imperfect solution. **

*Geneva Convention Regulations**. Under international agreement established by the 1949

Geneva Conventions, a hospital ship is protected from attack or capture. In order to be afforded such protection, the ship must not be used for any other purpose during the conflict, particularly in an attempt to shield military objectives from attack. Additionally, a hospital ship is required to abide by certain other regulations concerning notification, identification and markings, and operational and functional protections. ***i*

According to Article 22 of the Geneva Convention, the parties to the conflict shall be notified no later than ten days before a hospital ship is employed and it's characteristics must appear in the notification. The adversarial party is then required to acknowledge receipt of such information. The First Geneva Diplomatic Protocol of 1977 (to which the U.S. is not a signatory, but adheres to in a discriminating manner) takes this several steps further in Article 23 and includes keeping the enemy abreast of hospital ship movements and any other information that would facilitate early identification and recognition. Striii

Although the intention of both Articles 22 and 23 is to prevent a hospital ship from becoming a target, the present day results may be quite different. From a strategic perspective, the announcement of a hospital ship's deployment has recently served to send a message to the American people, and to the enemy, that our political and military leadership acknowledge and anticipate the possibility of large numbers of casualties. Although not intended to do so, the requirement to provide the enemy with the hospital ship's characteristics and movements, may prove to make the ship an easier target for some belligerents. "For unlike soldiers,

warriors of the new warrior class, do not play by the rules, do not respect treaties, and do not obey orders that they do not like." xix Probable targets will vary according to the operator's objectives. If capturing national attention is a goal, then attacking a medical facility should achieve it. Yhysicians, support personnel and their facilities make very attractive targets," and a hospital ship with it's tremendous specialty capabilities may be the most attractive of all. XXI

An assessment of enemy threat capabilities, may play a part in the decision to adhere or not to adhere to Article 22. During Desert Shield, the Iraqi government was given notification regarding the employment of the *Mercy* and *Comfort*, but gave no indication as to their conformity with the Geneva Convention accords. The *Comfort* recently steamed south under the guise of performing a migrant processing mission in Cuba, but diverted to Haiti when the planned U.S. invasion was deemed imminent. Although the invasion was canceled, the Haitian government was never notified of the hospital ship's employment. Still

By international agreement, hospital ships are visually identifiable by their white paint and large, dark red crosses. The Falklands Conflict, however, tested the Geneva Convention precepts regarding visual identification and proved that traditional marking methods were insufficient for proper ship identification, by night or day, even when the ships were completely illuminated. "To offset the shortcomings associated with visual identification, distinctive radio, radar, and underwater acoustic identification mechanisms, as well as distinctive lighting, have been suggested as effective means to protect medical transports." Presently, flashing blue lights, which can be seen with binoculars both day and night from approximately 10 miles

away, serve as signals, as does the secondary surveillance radar system, Identification Friend of Foe (IFF).**

Regardless of whether the Red Cross is officially respected in future wars, the operational commander is fully aware that the hospital ship's radar signature is one of a tanker. Even more importantly, he realizes that "weapons of any sort, fired on the strength of any sensor except the human eye, are blind to the color of the ship's paint or the brightness of her lights." xxvi Thus the chance for one or both of today's hospital ships to fall victim to cruise missiles is as real as it was for their World War II predecessors who fell victim to kamikaze attacks in the Pacific At present, the hospital ship possesses no self-defense capabilities. There are some in the military and legal communities who have suggested the installation of ECM, chaff and infra-red decoy as limited self-defense measures (which should hopefully not violate the protected status of the hospital ship. xxvii Conversely, there are those that argue that the addition of such equipment would threaten the "Angel of Mercy" image that has served the hospital ships so well over the years. According to the medical planners at CINCPACFLT and CINCLANTFLT, there are no plans for the addition of any self-defense capabilities to the ships. In the theater of operations, their only self-defense may be the Aegis umbrella of the battlegroup and/or geographic dispersion.

Article 34 of the Second Geneva Convention stipulates that "hospital ships (and similarly medical aircraft) may not possess or use a secret code for their wireless or other means of communication." Originally intended to prevent a hospital ship from spying, this regulation is considered by many to be archaic in today's warfare environment. Adherence to this article by the British in the Falklands and the U.S. in Desert Storm, severely limited the

ability of the operational commander to utilize the hospital ships. During Desert Storm, the ship's classified communications guard was transferred to COMSCSWA Bahrain (ashore) and all incoming/outgoing data messages were transferred via helicopter (pigeon post), often resulting in the delay of time sensitive information. What made matters even worse, was that a great majority of U.S. combatant units were unaware of the hospital ships' inability to use secure communications during hostilities. According to two Joint Lessons Learned (JULLS) reports, the international community is looking to amend the Geneva Convention and allow encryption equipment aboard hospital ships. However, a lawyer from the International Law Department at CNO Headquarters, claims that any such amendment "is a long way from being addressed, for it's tough enough just to get all the countries together at one sitting."

As expressed in the Geneva Convention, "medical aircraft are those planes and helicopters, military or civilian, permanent or temporary, which are exclusively employed for the removal of wounded, sick and shipwrecked, and for the transport of medical personnel and equipment, and which are under the control of a competent authority of the Party to the conflict."

Medical aircraft, recognized as such, should not deliberately be attacked. (However, there is no specific treaty to which the U.S. is a party providing this protection). It is important to remember that to be given even a chance for protection, the medical aircraft that bear the red cross and are dedicated to the MEDEVAC mission, cannot be used to transport healthy combatants back to the conflict. If used in this capacity, the aircraft may be viewed by the enemy as "force enhancers." Viewing this restriction from another perspective, one author has remarked, "a hospital facility on a troopship (i.e. LHA or LPH) has a major advantage over a

specifically dedicated hospital ship; troops received as casualties can be returned to the front, whereas the Geneva Convention prohibits hospital ship casualties from directly returning to the field."

During Desert Shield/Storm there were not enough dedicated or lift-of-opportunity helicopters to return troops back to the front or to another medical platform.

According to article 31, an opposing force or a neutral observer (as was done in the 1982 Falklands Conflict by the Red Cross) may visit and search hospital ships in order to ensure that they are being used solely for the treatment of the sick and wounded. Additionally, the enemy may detain a ship for no more than seven days (if required by the gravity of the circumstances), control the ship's means of communications, order the ship to depart, make them take a certain course, or refuse assistance to them. This article, though not by it's intent, provides a welcomed opportunity for a terrorist group to capture a hospital ship and take it's passengers hostage.

Yet another operational constraint imposed on hospital ships is "that these ships will act at their own risk and peril during and after the engagement." They are in no way to be provided protection by a either single escort or a convoy. To illustrate this point:

'During World War II, the *USS Nautilus* (SS-168) approached a Japanese convoy and positively identified one ship as the *American Maru*, a designated hospital ship. Based on his knowledge edge of international law, the ship's Commanding Officer, evaluated the ship's lack of markings and her participation in an escorted convoy as disqualifying her from protection afforded a hospital ship. He recounted that she was treated as a legitimate target under the warfare instructions we were executing, and was sunk during the action." xxxxiii

It is plain to see that there is a great deal of "need to know" information for the operational commander in regard to the hospital ship. It is also clear that the commander must balance the

"good (capabilities) with the bad (limitations)" in order to best utilize the white sanctuaries,

Mercy and Comfort.

MISSION

The following are the primary and secondary missions for the hospital ship and have remained the same since 1986:

"The primary mission as prescribed in the Required Operational Capability (ROC) and Projected Operational Environment (POE) is to provide a mobile, flexible, rapidly responsive afloat medical capability, to provide acute medical care in support of ATFs, Marine Corps, Army and Air Force elements, forward deployed Navy elements of the Fleet, and fleet activities located in areas where hostilities may be imminent. In support of the primary mission, one of the 12 ROCs is to extend operations off a hostile beachhead and provide an aviation facility for day and night operations with minimal support for helicopters for both delivery of wounded for treatment and evacuation of patients to other facilities."

"The secondary mission is to provide a full hospital service asset available for use by other government agencies involved in support of disaster relief operations and humanitarian missions worldwide."

RECENT EMPLOYMENTS

Having already discussed the capabilities, limitations and the mission of the *Mercy* and the *Comfort*, discussion will now proceed with an historical account of the ships' recent employments and an examination of their utilization in respect to the Navy's stated mission for these affoat medical vessels.

During Desert Shield/ Storm, the hospital ships, *Mercy* and *Comfort*, received some very positive press in the United States. An article in the January 1991 edition of *Leatherneck* featured the two ships. The opening line of the article read, "Ask any Marine who has ever stormed a beachhead and he'll tell you how comforting it is to go into battle knowing that if

he's hit, he's only a 'hop, skip and jump' from a hospital ship."xl In contrast, the CENTCOM Surgeon General's assessment of the two ship's performance in JULLS reads as follows:

"While the two hospital ships were in theater within 8 and 10 days of their planned arrival, they were outside the window needed to support the expected operation. Fortunately, casualties throughout the operation were less than anticipated. Neither hospital ship exceeded 100 patients at anytime during the two operations-Desert Shield/Desert Storm. The ship's ability to support combat operations depends on helicopter access to the battlefield. Either the ships distance or the combat forces distance to the littoral will have a significant impact on the use of this medical treatment facility. For operation Desert Storm, the ships were kept outside the range of helicopters and when the battle plan changed the Marine forces were out of reach of the ships. While hospital ships can be counted in total theater medical assets, they can not be counted on for support of combat/forward deployed forces." Sli

The concept of operations as developed by COMUSNAVCENT for Desert Storm called for one of the hospital ships to be located forward in order to receive casualties by helicopter. The second hospital ship was to move forward to relieve the first when conditions dictated, allowing the first ship to move rearward to evacuate patients as appropriate.

If CENTCOM's appraisal of the hospital ships' utility during Desert Shield/Storm is correct, then the concept of operations was not actualized and neither ship accomplished it's mission. As reported by CENTCOM, the ships were: (1) not mobile, flexible, or rapidly responsive, (2) did not extend operations off a hostile beachhead or provide an aviation facility for casualty evacuation once hostilities commenced, and (3) as a result of the aforementioned limitations, could not provide acute medical and surgical care to U.S. and allied armed forces.

When recently asked why he thought the *Comfort* was not utilized for casualty evacuation during Desert Storm, a senior nurse who served on board during the conflict thought that the decreased visibility caused by the oil fires might have been a contributing factor. When the same question was posed to a member of the staff at the Naval Doctrine and Training Center,

the response was, "there was no need to put the hospital ship platforms at risk for a missile or a mine hit since there was excess medical capability in theater to handle the casualties." He went on to say, that "if the situation warranted it, NAVCENT would have operated at least one ship at a time in the littoral."

Since the scenario in Desert Storm did not call for the *Mercy* or the *Comfort* to be put in harm's way, it is hard to guess how the concept of operations would have worked out. What we do know, however, is that the NAVCENT commander made a conscious decision to provide operational protection for the hospital ships through geographic dispersion.

During the latter part of May 1994, a call from Pennsylvania Avenue to CINCLANTFLT resulted in the *Comfort's* deployment to Kingston Harbor, Jamaica to serve as a Haitian Migrant Processing Center. As reported by both a nurse and a physician who were aboard during this mission, the ship literally received hundreds of Haitian migrants from one Coast Guard vessel at a time, several times per day. Only the Haitians who were granted asylum were given full physical examinations, but as might be expected, there were many more who required medical attention for conditions such as dehydration. Handicapped by the design of the hospital ship, the process of transferring migrants from Coast Guard vessels onto the *Comfort* was quite hazardous. Additionally, this platform was hampered by a lack of: (1) security for the large number of migrants who would come on board, (2) supplies to provide routine care for the sick, and (3) isolation quarters for those with active or suspected TB. After approximately three months of hard work by the ship's crew and it's medical contingent, the *Comfort* was sent back to Baltimore, Maryland with a less than favorable report card from the line community. Abia

Several weeks after returning home, the *Comfort* was reactivated by CINCACOM in light of the probable U.S invasion of Haiti. The CINC was overheard to say, "how would it look to the American public if, after sending the *Comfort* to Jamaica to serve as a Migrant Processing Center, we don't send it to Haiti to care for our own and allied servicemen?" Nhill the U.S. and Haiti were in negotiations, the *Comfort* was sent to Guantanamo Bay, Cuba to assist the Joint Task Commander with the migrant processing of Cubans and, if the migrant population on base exceeded 30,000, provide berthing for armed forces personnel. As one physician on board during this reactivation pointed out, "you can imagine the morale level of medical personnel who were taken from their practices to potentially provide hotel services aboard ship." Shix

As it turned out, the *Comfort* was only off the coast of Cuba for a few days before it set sail for Haiti. Within hours of the canceled invasion, the ship was in Port-au-Prince Harbor participating in Operation Restore Democracy. During the first two weeks of this mission, there were over 100 helicopter landings (more than occurred throughout Desert Shield/Storm). Unfortunately, the lack of supplies to provide routine versus intensive medical and surgical care posed a major problem. (Keep in mind, however, that the ship had a potential for three missions when it left home port in early September and combat support was the highest priority among them). Within one month of arrival in Haiti, the *Comfort* was replaced in theater by the 28th Army Combat Support Medical Battalion and once again returned home. If

As stated in the secondary mission statement, the hospital ship is available for use by other government agencies involved in support of disaster relief operations and humanitarian missions worldwide. But under which of these missions do migrant processing and berthing of

armed forces personnel fall? It appears to this author that the employment of the *Comfort* in these two scenarios was intended to provide U.S. government "disaster relief" and not necessarily humanitarian relief for Haitians and Cubans. For Operation Restore Democracy, the mission for the *Comfort* fell somewhere between combat relief than humanitarian relief.

The secondary mission statement also calls for the hospital ship to provide a full service asset. In more simplistic terms, this means that the ship medical supplies need to cover the gamut from routine care to the most intensive specialty services. From Desert Shield to Restore Democracy, the lack of supplies to provide a full service asset, has presented a major obstacle for the hospital ships, *Mercy* and *Comfort*. With financial restrictions at the root of the problem, a quick and easy solution will not be forthcoming.

Over the last four years, the hospital ships have been employed in support of several very varied U.S. missions. Despite their enormous medical capabilities and dedicated staff, the ships have fallen short of mission accomplishment. With this less than impressive "track record," will the operation commander be calling upon the "Angels of Mercy and Comfort" in the future?

FUTURE OF THE SHIPS

According to the Medical Planners at CINCPACFLT and CINCLANTFLT the hospital ship platforms are as much in demand as ever before. At least one hospital ship has been a part of recent U.S. military plans in the Adriatic, Caribbean Basin and Arabian Sea. The *Mercy* and the *Comfort* would more than likely be used in a U.S conflict with North Korea. Both ships are the major medical platforms in the upcoming fleet exercises, *Kernel Blitz* and *Purple*

Star. Both have recently been referred to as "afloat replacements for the hospital installations that no longer exist overseas." liv

The old saying, "well if you don't succeed, try, try, again," seems to apply to the hospital ship and its recent humanitarian and disaster relief taskings. Representatives from the MSC, medical and combatant communities will be meeting sometime within the next few months to discuss each ship's lack of isolation and DECON capabilities, ongoing supply problems, and need for a stronger crane to facilitate surface patient transfer. It is this author's opinion that the primary and secondary missions for the hospital ships need to be reexamined also.

Interestingly, the one, unrealistic, but most often expressed wish by personnel intimately involved with employment of the hospital ships is, "boy, I wish I could cut each hospital ship in half." ^{Ivi} Having two, three or four 500-bed hospital ships would surely increase their usage as evacuation ships and overall flexibility in a whole host of other ways. But since both ships are expected to meet the 20 to 30 year life-cycle requirement, the wish for smaller, more mobile ships in the near term appears to be a "pipe dream."

CONCLUSION

In conclusion, the hospital ship is a viable medical platform. And as such, there is much information that the operational commander needs to know about the ship as he plans for its utilization in combat, humanitarian or disaster relief scenarios. One placed in full operating status, it is incumbent upon him to use this precious, but restrictive, commodity wisely and not place it at risk unnecessarily. Considering today and tomorrow's warfare environment, this is and will continue to be, a tall-tasking.

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